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ABSTRACT

As a predominant research method, the mail survey has been the subject of a considerable body of research. Several major reviews of research have been published that attempt to synthesize findings of empirical studies and identify techniques that stimulate responses. The review articles are examined, identifying procedures and potential publication sources. Reviews are limited to those that are comprehensive in nature, and that focus on identifying techniques that facilitate response rates in mail surveys. Through searches of computerized databases, 9 reviews were located, based on 329 source studies. There is considerable variation among the nine articles. It is evident that the choice of keywords or descriptors and differences in the databases have influenced the outcomes of the reviewers' search efforts. There is great disparity in the ways in which the procedures used in the integrated review articles are documented. The next step will be to compare the mail survey response rate variables that were studied. Four tables present information about the reviews. Appendix A lists the journal of publication for the source articles across time, and Appendix B lists the source article publication sources. (SLD)



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Response Rates in Mail Surveys: A Review of the Reviews

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Response Rates in Mail Surveys: A Review of the Reviews

According to Dillman (1991), the predominant sample survey method used in this country is the mail survey. As such, it has been the subject of a considerable body of research. Most studies of mail survey methodology focus on specific design elements, but several major reviews of research that attempt to synthesize the findings of the independent empirical studies and to identify the techniques that reliably stimulate responses in mail surveys have been published. In addition, other less comprehensive reviews focusing on specific survey design variables have been published. The methods used by the researchers in these reviews have varied, and not all of the more recent studies have utilized quantitative analytical procedures. The relative merit of the findings are somewhat dependent on the way in which the reviews were conducted and reported, of course, but both types of reviews can provide valuable information for other researchers in this field regarding mail survey procedures and potential publication avenues for research on mail surveys.

Reviews of research are expected to preface new research studies but are also sometimes conducted on a more extensive scale as independent endeavors. Much less attention has been placed on methods for conducting and reporting reviews of previous research studies than on new or primary research studies. Jackson (1980) focused on integrative reviews of research, documenting and evaluating various methods by which they had been accomplished. The use of meta-analysis provided a major change in comparing the results of multiple studies. Cooper (1989) noted that the reviewing of previous research studies had been facilitated by the recent availability of computerized literature searches and the development of quantitative procedures for analysis.

The purpose of the present study was to examine the review articles themselves, identifying procedures and potential publication sources for use by those interested in the study of mail survey methods. For purposes of this study, review articles are limited to those that are comprehensive in nature and focus on identifying techniques that facilitate response rates in mail surveys. In the present context, "comprehensive" is defined as including several survey design variables that have possible impacts on survey response rates, and "source studies" are the citations (published or unpublished, including books) referenced by the review author(s) that were included in their quantitative analyses or that contributed to the formulation of their conclusions in qualitative reviews.

Method

Procedures for Identifying Review Articles

The first step in identifying review articles was to search computerized CD-ROM databases containing abstracts in the fields of psychology, sociology, business and marketing, and education. The databases used were PSYCLit (1974-1992), Sociofile (1974-1992), ABI/Inform (1987-1992), and ERIC (1966-1992). Yu and Cooper (1983) had used "response rate" and "survey" in searching for articles for their review. Yammarino, Skinner, and Childers (1991) used "response rates" and "mail surveys" as key words.



An initial list of abstracts from each database was compiled by using the key words "response rate" or "response rates" and "mail survey" or "mail surveys." The ABI/Inform database searched only for the singular forms, amending the plural to the singular for both "rates" and "surveys." Jackson (1980), in searching for review articles, had looked for articles under the headings of "literature reviews" and "research reviews." Further defining the scope of the present search by adding the term "research review" or "literature review" was too limiting, however, sometimes producing no citations, so the more inclusive initial lists were used. Reference lists in the review articles identified through the computer searches were examined for other review articles not included in the computer databases.

Four acceptable review articles were found in PSYCLit among the 109 articles identified as containing "response rate" or "response rates" and "mail survey" or "mail surveys." Four review articles were among the 74 abstracts listed from ABI/Inform, and two from the 66 drawn from Sociofile. There were no review articles that met the criteria for this study among the 137 abstracts produced by the ERIC searches. Some of the acceptable review articles appeared in more than one database. One review article was indexed in three of the databases, two were found in both PSYCLit and ABI/Inform. When duplication was eliminated, there were six review articles that met the criteria for inclusion in the present study. Examination of the reference lists from those articles produced three additional reviews for the total of nine that serve as the basis for this study (see References: Reviews Included in the Study).

Selection of Reviews

Some of the review articles initially identified were not included in this study because they focused solely on a specific aspect of survey design, such as monetary incentives (Armstrong, 1975), cover letter personalization (Worthen & Valcarce, 1985), or type of postage used (Armstrong & Lusk, 1987). One review (Yu & Cooper, 1983) that was not included was not limited to mail surveys, and it did not distinguish between mail surveys and other types of surveys in the presentation of many of the findings. Berdie, Anderson, and Niebuhr (1986) also went beyond mail surveys. Houston and Ford's (1976) review examined response speed and quality, rather than response rate, and was excluded from the present study. Reviews that did not contain or make available a list of the source articles, such as Goyder (1982), were also not included. Dillman (1991) cited specific studies to illustrate the points he made regarding specific mail survey techniques as part of a comprehensive system for conducting a survey.

Variables

For each review article, the following information was sought: date and journal in which the review article appeared, type of analysis used, criteria for inclusion of source articles, number of source articles, years and journals in which source articles were published, method by which source studies were identified. When discrepancies appeared between reference lists in the listings of source articles, the original articles were obtained to determine the correct reference listing.



Source Studies

Some review articles (Bruvold & Comer, 1988; Fox, Crask, & Kim, 1988; Heberlein & Baumgartner, 1973; Yammarino, Skinner, & Childers, 1991) provided reference lists of the articles used in the quantitative analysis (source studies) and separate lists of references providing background or introductory material. This clearly identified the source studies, although the titles of some of the source studies did not clearly delineate them as relevant for mail surveys. In Conant, Smart, and Walker (1990), the review of articles to determine response facilitation techniques was only the first stage in a more involved study. The relevant citations were included in a single table, making them easy to discern.

For the other four reviews, the two researchers independently read the articles and determined which sources were background or general references and which should be included as source studies. They then compared their lists and resolved discrepancies through discussion and clarification of the criteria for inclusion. It was decided that references that were cited as leading to the conclusions of the review author should be included, even though they were unpublished works, books, or articles that appeared to be inappropriate because their titles indicated a focus on surveys other than those conducted through the mail.

The following information for each source study was entered into a Fox Base/MAC database: author(s), year of publication, journal in which it was published, and which review articles had used the study. Citation as a reference in each of the nine review articles was coded as a dichotomous variable. Because of the small number of review articles and the varying procedures used in them, frequency distributions were used in analyzing the data in addition to descriptions of the reviewers' procedures.

Results

Publication of Review Articles

Three of the nine reviews were published in Public Opinion Quarterly, three in marketing research journals (Journal of the Market Research Society and Journal of Marketing Research), and one each in the Journal of Business Research, Journal of Management, and the American Sociological Review (see Table 1). None of the reviews appeared in either education or psychological journals.

Procedures Used in Review Articles

Four of the reviews utilized quantitative analyses, while the other five could best be described as qualitative. In general, the quantitative review articles contained better documentation of the methods used than the qualitative reviews. For example, none of the five qualitative reviews contained information about how the source articles were identified or the criteria for inclusion. The four quantitative reviews, in contrast, were detailed in describing methods for locating the articles, selection criteria, and analysis.

Locating Source Studies

Heberlein and Baumgartner (1978), the earliest quantitative review, did not use computerized searches, as did authors of the latter quantitative reviews. Computerized search services were relatively



new at that time. Heberlein and Baumgartner published their review in a sociology journal. The Sociofile indexing system in use today (which indexes journals in the field of sociology) only dates back to 1974, as does PSYCLit. Social SciSearch began in 1972. The primary source of articles for the Heberlein and Baumgartner review was an annotated bibliography by Potter, Sharp, Hendee, and Clark (1972) containing 193 citations, supplemented by manual reviews of journals and citations in the published articles that were located. The review authors did not, however, identify the journals which were searched manually.

Table 1

Review Article	Pub. Year	Journal	No. Source Articles	Analysis
Yammarino, Skinner, & Childers	1991	Public Opinion Quarterly	115	meta-analysis
Conant, Smart, & Walker	1990	Journal of the Market Research So	oc. 52	qualitative
Fox, Crask, & Kim	1988	Public Opinion Quarterly	40	meta-analysis
Bruvold & Comer	1988	Journal of Business Research	212	weighted-least-squares logit regression
Harvey	1987	Journal of the Market Research Sc	oc. 129	qualitative
Duncan	1979	Journal of Management	60	qualitative
Heberlein & Baumgartne	r 1978	American Sociological Review	95	quantitative
Kanuk & Berenson	1975	Journal of Marketing Research	69	qualitative
Linsky	1975	Public Opinion Quarterly	57	qualitative

Bruvold and Comer (1988), began with the list of studies used by Heberlein and Baumgartner. This was supplemented by manual searches of five journals (Journal of Marketing Research, Journal of Marketing, Public Opinion Quarterly, Journal of Business Research, and Journal of Applied Psychology) for the years 1964-1980. The reviewers also conducted computer searches on six databases: Social SciSearch, PsychINFO, ABI/Inform, Sociological Abstracts, U.S. Political Science Documents and ERIC. For key words, they used "response rate" and "mail survey or mail questionnaire." They included only published journal articles and one reference published in a conference proceedings.

Fox, Crask, and Kim (1988) conducted a manual search of three of the same journals as Bruvold and Comer (Journal of Marketing Research, Public Opinion Quarterly, and Journal of Applied Psychology) for the previous 25 years or, in the case of the Journal of Marketing Research, since 1964 when it began



publication. They also did a computerized search using PsychINFO and examining the reference lists from relevant articles. The keywords used in the computer search were not identified. The reviewers used only published articles that were experimental studies. Response rate variables that were coded subjectively, such as "salience" that had been included in the Heberlein and Baumgartner (1978) study, were not considered.

Yammarino, Skinner, and Childers (1991) began by examining reference lists of previously published review articles, including Kanuk and Berenson (1975), Linsky (1975), Heberlein and Baumgartner (1978), Yu and Cooper (1983), Harvey (1987), and Fox, Crask, and Kim (1988). They then conducted computer searches of the following databases: ABI/Inform, ERIC, Social SciSearch, Sociological Abstracts, and PsycINFO. The keywords of "mail surveys," "response rates," were used and also combined with the names and synonyms for the 17 response rate variables targeted for study. To identify recent studies (1978 and later), a manual search of each of the following ten journals was performed: American Sociological Review, Journal of the Academy of Marketing Science, Journal of Advertising Research, Journal of the American Statistical Association, Journal of Applied Psychology, Journal of Marketing, Journal of Marketing Research, Journal of the Market Research Society, Psychological Reports, and Public Opinion Quarterly. To be included, the source studies had to have a manipulated factor and had to include response rates for the various conditions.

Selection Criteria Differences

Six of the reviews limited their source citations to published articles (Duncan, 1979; Fox, Crask, & Kim, 1988) and a published book (Kanuk & Berenson, 1975) or proceedings (Bruvold & Comer, 1988; Conant, Smart, & Walker, 1990; Heberlein & Baumgartner, 1978). The other three reviews (Linsky, 1975; Harvey, 1987; Yammarino, Skinner, & Childers, 1991) included one or more unpublished papers and, in the Yammarino, Skinner, and Childers review, five unpublished studies cited in a Public Opinion Quarterly review by Armstrong and Lusk (1987).

Each of the eight books was cited in only a single review. With one exception, the unpublished papers were also unique to a single review, as were the five unpublished studies cited by Armstrong and Lusk (1987). There was only one instance of duplication among the studies cited from meeting proceedings. Source Studies

A total of 329 source studies (as defined earlier) was used in the nine review articles. Some source articles were sometimes referenced incorrectly, initially causing them to be considered additional articles. Differences (errors) occurred in publication year, journal pages and/or volume number, journal title, author, spelling of the author's name, and even title of the article.

Scope of Source Study Publication Dates

The reviews appeared from 1975 through 1991, with no reviews appearing between the 1979 Duncan review and the 1987 review by Harvey. The number of source studies used in the reviews ranged from 40 to 212. While all review authors had access to articles appearing in the early years, three reviews were



deliberately limited in scope to specific time periods: Duncan, 1961-1978; Fox, Crask, and Kim, 1961-1984; and Conant, Smart, and Walker, 1974-1988 (see Table 2).

Table 2
Publication Years of Source Studies

					Pu	blicatio	on Daf	e of So	urce A	rticles	3				
Review Article	Pub. Year	nd ^a	1921 - 39	1940 - 44	1945 - 49	1950 - 54	1955 - 59		1965 - 69		1975 - 79	1980 - 84		Total	Range
Yammarino, Skinner, & Childers	1991		1	3	1	6	4	7	12	25	33	15	18	115	1937-86
Conant, Smart, & Walker	1990									1	27	18	6	52	1974-88
Fox, Crask, & Kim	1988							3	6	8	15	8		40	1961-84
Bruvold & Comer	1988		6	8	5	14	14	15	23	42	60	24	1	212	1921-85
Harvey	1987	1	3	6	7	14	10	7	18	15	20	23	. 5	5 129	1937-87
Duncan	1979							1	9	18	32			60	1961-78
Heberlein & Baum- gartner	1978		6	8	6	13	13	13	18	16	5 2	:		95	1921-75
Kanuk & Berenson	1975		1	5	5 6	5 8	3 8	3 16	12	2 11	1 2	2		69	1939-75
Linsky	1975	1	1 1	l 5	5 2	2 14	10) 6	13	3 5	5			57	1939-74
Total in Database		:	1 9	9 10) 12	2 2 1	L 21	l 25	5 32	2 49	9 83	3 49	9 1	7 329	1921-8

a**Undated**

Of the 329 source studies, 136 (41.3 percent) were cited in only one review. Each of the nine reviews contained at least one source study not found in any other review (see Table 3). Three source studies were cited in eight reviews, the maximum possible given the scope in publication years of the nine reviews. Six studies were cited in seven reviews, 22 in six reviews, 18 in five reviews, 37 in four reviews, 43 in three reviews, and 64 in two reviews.



Table 3
Incidence of Unique Source Studies

Review Authors	Publication Year	Total Citations	Unique Citations				
Yammarino, Skinner, and Childers	1991	115	27	23.5%			
Conant, Smart, and Walker	1990	52	11	21.1%			
Fox, Crask, and Kim	1988	40	1	2.5%			
Bruvold and Comer	1988	212	38	17.9%			
Harvey	1987	129	29	22.5%			
Duncan	1979	60	8	13.3%			
Heberlein and Baumgartner	1978	95	1	1.1%			
Kanuk and Berenson	1975	69	15	21.7%			
Linsky	1975	57	6	10.5%			
Total		329	136	41.3%			

Three journals accounted for almost half of the source articles (see Table 4). One fourth of the source studies had been published in Public Opinion Quarterly. The Journal of Marketing Research and the Journal of Applied Psychology accounted for another 22.5 percent of the studies. Fifty-four journals included had published no more than two of the cited source studies.

Bias Favoring the Journal in Which the Review was Published

In examining the number of source studies drawn from the publication in which the review articles appeared, the findings were somewhat reflective of the overall percentages of articles in the total list of 329 citations for several of the reviews. Linsky drew 15 (26 percent) of his source articles from Public Opinion Quarterly, the journal in which his review appeared (see Appendix B). Yammarino, Skinner, and Childers (1991) and Fox, Crask, and Kim (1988), also published in Public Opinion Quarterly, listed 19 percent and 18 percent, respectively, of their citations from that journal. It must be noted, however, that 25 percent of the articles in the total list of source articles appeared in Public Opinion Quarterly.

Kanuk and Berenson (1975) had only 9 percent of their references from the Journal of Marketing Research, which accounted for 12.5 percent of the total source article citations. Harvey (1987) and Conant, Smart, and Walker (1990), both published in the Journal of the Market Research Society, had 5 percent and 4 percent, respectively, of their source articles from that journal which accounted for 3 percent of the overall list of source articles.



Table 4
Publication Sources of Studies Cited in Reviews

	Source	Studies
Journal	Number	Per Cent
Public Opinion Quarterly	83	25.2
Journal of Marketing Research	41	12.5
Journal of Applied Psychology	33	10.0
Journal of Marketing	14	4.3
Journal of Advertising Research	14	4.3
American Sociological Review	13	4.0
Journal of the Market Research Society	10	3.0
Journal of the Academy of Marketing Science	7	2.1
Journal of the American Statistical Association	7	2.1
Psychological Reports	6	1.8
Sociology and Social Research	5	1.5
Journal of Business Research	4	1.2
Journal of Personality and Social Psychology	4	1.2
Printers Ink	3	0.9
American Marketing Association Educators' Conference Proceedings	3	0.9
Journals publishing two source articles (10 journals)	20	6.1
Journals publishing one source article (44 journals)	44	13.4
Books	8	2.4
Unpublished manuscripts	5	1.5
Studies cited in previous publication but not published independently	5	1.5

Heberlein and Baumgartner (1978) leaned more heavily on the American Sociological Review, in which they were published, including 11 percent of their articles from that journal that accounted for only 4 percent of the total list of citations.

Two reviews appeared in journals that do not typically publish survey research method studies. Bruvold and Comer (1988) had only one of their 212 references from the Journal of Business Research, but that journal contributed only four citations to the total list. Duncan (1979), as well as all other review authors, included no citations from the Journal of Management, in which his review appeared.



Analytic Procedures

Heberlein and Baumgartner (1978) based their analysis on procedures introduced by Sudman and Bradburn (1974) and a similar procedure by Glass and Smith (1976), one of the early works on meta-analysis. Bruvold and Comer (1988) endeavored to develop a model to estimate mail survey response rates using a weighted-least squares logit regression procedure based on Berkson (1944), Flath and Leonard (1979), and Green, Carmone, and Wachspress (1977). Fox, Crask and Kim (1988) labeled their analysis as meta-analysis and described it as similar to that used by Armstrong and Lusk (1987) and Yu and Cooper (1983). Yammarino, Skinner and Childers (1991) also used meta-analytic procedures, citing Glass (1977), Hunter and Schmidt (1990), and Hunter, Schmidt, and Jackson (1982) as methodological references.

Presentation of Findings in Qualitative Reviews

Linsky (1975), Kanuk and Berenson (1975) and Duncan (1979) utilized tables in summarizing the impact of specific manipulations. Conant, Smart, and Walker (1990) presented a single table summarizing the effects of the various techniques. Harvey (1987) used only text descriptions. None of the three articles appearing in the marketing research journals used quantitative procedures.

Discussion

There is considerable variation among the nine review articles broadly examining mail survey response rate facilitation techniques. These are nine independent, sometimes overlapping, reviews rather than one review replicated eight times. Procedures are better documented in the quantitative reviews, although it is recognized that writing style must be geared to the style preferred by the journal to which a manuscript is submitted. The existing level of statistical sophistication at the time at which a study is conducted must also be taken into account. More recent authors have benefited from the computer search capabilities available to them in locating source articles as well as in expanded statistical alternatives.

The list of 329 source studies cited in these nine reviews is not exhaustive. Each review included one or more studies not included in others covering the same time span. Other studies of meil survey methods do exist in addition to those cited in these reviews. Those authors who documented their search procedures each went beyond previous lists or citation lists in other reviews in their efforts to uncover additional research studies. The most thorough searches included computer searches, citation lists in identified articles, and manual searches of journals.

While computer searches facilitate the location of articles, those predating the computer abstract databases are less easily found. Potter, Sharpe, Hendee, and Clark (1972), Berdie and Anderson (1974), and Pressley (1976) pioneered the compilation of annotated indexes in mail survey research studies and each was cited in at least one of the reviews. *Indexes to Survey Methodology Literature* (U. S. Bureau of the Census, 1974) might be helpful in locating early references. *The Bibliography of Marketing Kesearch Methods* (Dickinson, 1986) could be a valuable resource in identifying current as well as older articles. Dillman and Sangster (1990) cover the years 1974-1989 and provide an update for the extensive



bibliography found in Dillman (1978). Public Opinion Quarterly maintains a cumulative index by topic to articles it publishes.

The choice of keywords or descriptors used in computerized searches of abstract databases influences the results. Some of the reviewers may not have discovered relevant articles because the terminology used in their searches was too limited. Searches using "response rate" did not produce identical lists of citations to those when "response rates" was used, except in the ABI/Inform database which shortened the plural terms to the singular forms.

Differences in databases used and their contents also influence the outcomes of the search efforts. PsycINFO is an online database of psychological publications that includes dissertations, which are not included in PSYCLit. The Social SciSearch database, used by some of the review authors, only permits searches of the titles. Social SciSearch is the online version of Social Sciences Citation Index, which is very inclusive. Having any type of computerized search process, though limited to title, is a distinct improvement over using the bound volumes of the Index. The databases that were searched in the present study (ERIC, ABI/Inform, PSYCLit, and Sociofile) were all available on CD-ROM and all contained abstracts as well as titles and descriptors or keywords. In searching the databases, the entire entry (including abstract) was searched for the search term(s).

Fox, Crask, and Kim (1988) expressed concern that using only published studies might bias the results, because studies that failed to find significant effects might not appear in print. They did note, however, that published studies were easier to obtain. Because many studies have more than one variable being manipulated at a time, nonsignificant results for individual factors were more prevalent than significant ones in their data. Only 23 percent of the 214 effect estimates in their study were statistically significant.

It would be expected that more recent source studies would appear in only the most recent review. Differing selection criteria and search procedures may account for the high incidence of source studies cited in only a single review, rather than the apparent failure to capitalize on previous reviews.

Few journals have been consistent publishers of mail survey response rate studies through the years (see Appendix A). The number of journal articles found by the reviewers may, to some degree, be related to the search procedures employed by the reviewers. Those journals searched most thoroughly (manually, issue by issue) had the largest numbers of citations in the overall list of 329 source citations. The ten journals manually searched by Yammarino, Skinner, and Childers (1991), are the ten journals with the largest numbers of citations in the total list of source articles. Similarly, the three journals searched by Fox, Crask, and Kim (1988) were the three with the largest numbers of source article citations, and four of the five journals thoroughly searched by Bruvold and Comer (1988) are the most frequently cited journals in the total list.

The extent to which reviewers used articles published in the journals in which their reviews appeared was generally not inconsistent with the proportion of source citations from that journal in the



overall list. The publication date of the review and the number of appropriate articles previously published in the same journal are subject to considerable variation, making it difficult to draw conclusions regarding the extent to which use of references from the review journal have an impact on acceptance for publication. The percentage of source articles from the respective review journals, however, does not greatly exceed the total percentage of overall source articles appearing in the specific review journals.

Publication of studies on mail surveys have been published primarily in journals with audiences in public opinion research and marketing. Sociological and psychological journals have also been open to such studies, but to a lesser extent. By broadly defining educational journals (Journal of Educational Research, Educational Research Bulletin, Journal of Educational Psychology, Research in Higher Education, Vocational Guidance Quarterly, Journal of Experimental Education, and College Student Journal), there was a total of 10 articles (3 percent) in the list of 329 source citations that can be attributed to any educational journals. It is small wonder that education was omitted from Dillman's (1991) statement that "Statistics, psychology, marketing research, economics, and the various health sciences are disciplines in which research efforts to improve mail survey methods are regularly conducted and reported" (p. 226).

It is discouraging to note that no review articles were located in education journals through the ERIC search. Another observation that can be made at the conclusion of this study is that there was not a single article on the source citation list of 329 that was published in an American Educational Research Association (AERA) journal (i.e., American Educational Research Journal, Review of Educational Research, Journal of Educational Statistics, Educational Evaluation and Policy Analysis, Review of Research in Education). This is particularly disturbing to those who consider AERA as the foremost organization for researchers in the field of education. While AERA publishes the Journal of Educational Statistics, this publication does not provide a forum for studies on design issues relating to research on mail survey methods. Included in the 137 ERIC citations resulting from the computerized search were 20 papers on survey research methodology that had been presented at annual meetings of AERA. This finding supports the contention that the descriptors used in the search were relevant.

Much can be learned from the review articles. This study calls attention to the disparity with which the procedures used in the integrated review articles were documented. The next step in this study will be to examine and compare the mail survey response rate variables that were studied in the reviews and the findings of the reviewers regarding those variables.



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Appendix A

Journal Publication of Source Articles Across Time

					Pı	<u>ıblicat</u>	on Ye	<u>r</u>				
Journal	921 - 39	1940 - 45	1945 - 49	1950 - 54	1955 - 59	1960 - 64	1965 - 69	1970 - 74	1975 - 79	1980 - 84	1985 - 89	total*
Journal of Applied Psychology	4	4		4	2		1	10	8			33
Journal of Juvenile Research	1											1
Journal of Educational Psychology	, 2											2
Journal of the Am. Statistical Assi	n. 1		1		1		1		3			7
Pedagogical Seminary	1											1
Printers Ink		1	1	1								3
Psychological Bulletin		1										1
American Sociological Review		2	1	3	3			1	2	. 1		13
Journal of Educational Research		1					1					3
Educational Research Bulletin		1										•
Journal of Psychology			1									•
Public Opinion Quarterly			8	4	7	12	: 8	15	18	3 8	3	8
Public Opinion Quarterly citation	ı					1			1	. 3	}	,
Advertising Agency				1								
Sociology and Social Research				1	. 1	Ĺ	2	. 1	Ĺ			
Journal of Marketing				2	2. 4	ļ 1	l		5	5 2	2	1
Journal of Abnormal/Social Psych	holog	3y		1	l							
Proceedings of the Iowa Academy	y of S	Science	!	1	l							
books				3	3 2	2		1 3	2			
Applied Statistics					•	1						
Journal of Advertising Research						:	2 :	7	1 :	3	1	1
American Journal of Sociology							1					
Journal of Marketing Research							1	5	3 2	0 1	2	4
Journal of the Royal Statistical	Socie	ety					1					
Bulletin of the British Psycholo			ty					1				

^{*}Includes one undated, unpublished paper

Note. Ten most frequently cited journals are in bold print.



					Pı	ublicat	ion Yez	r		_		
Journal	1921 - 39	1940 - 45	1945 - 49	1950 - 54	1955 - 59	1960 - 64	1965 - 69	1970 - 74	1975 - 79	1980 - 84	1985 - 89	total*
Journal of Consulting Psychology	,					1						1
Am. Statistical Assn. Proceeding	;s					1						1
Industrial Marketing						1			1			2
Am. Journal of Public Health						1						1
Rural Sociology						1						1
British Journal of Psychiatry							1					1
British Journal of Preventive &	Social	Medi	cine				1					1
Journal of Personality and Socia	l Psycl	hology	,				1		3			4
Journal of Counseling Psychology	,						1					1
Social Forces							1					•
U.S. Govt. Printing Office							1					
Journal of the Market Research	Societ	y						3	1	2	4	10
Journal of Business Communication	on							1	1			:
Akron Business & Economic Revi	ew							1				
American Psychologist								1				•
Journal of Forestry								1				
Vocational Guidance Quarterly								1				•
Psychonomic Science								1				:
Research in Higher Education								1		1		:
Social Science Quarterly								2				2
Pacific Sociological Review								1				
Psychological Reports								1	1	2	2	(
Journal of Experimental Social F	sycho	logy						1				•
Ag. Dept., U. of Wisconsin		-						1				
Journal of Business Research									Í		1	
Journal of the Academy of Marke	eting S	Science	e						2	2	3	I

^{*}Includes one undated, unpublished paper

Note. Ten most frequently cited journals are in bold print.



Appendix A. Journal Publication of Source Articles Across Time (continued)

				_	P	ublicat	ion Yez	ır				
Journal	1921 - 39	1940 - 45	1945 - 49	1950 - 54	1955 - 59	1960 - 64	1965 - 69	1970 - 74	1975 - 79	1980 - 84	1985 - 89	total*
Sociological Quarterly		·							1			1
Arkansas Business & Economic Re	view								1			1
Management Science									1			1
Personnel Psychology									1			1
Journal of Business									1			1
Journal of Consumer Research									2			2
Revista Espanola de la Opinion P	ublic	a							1			1
Canadian Review of Sociology and	d An	throp	ology						1			1
Sociological Methods and Research	ch		-						2			2
Journal of Advertising										1		1
Southern Marketing Assn. Proceed	ings									2		2
European Research										1		1
College Student Journal										1		1
unpublished										2	2	4
Proceedings of the Am. Mktg. Assr	n.									3		3
Perceptual and Motor Skills										1		1
Zeitschrift fur Soziologie										1		1
Industrial Marketing Managemen	t									1	1	2
Journal of Exerimental Education										1		1
Quarterly Review of Marketing										1		1
Journal of Marketing Education											1	1
unpublished and undated												1
Totals	9	10	12	21	21	25	32	49	83	50	17	329

^{*}Includes one undated, unpublished paper

Note. Ten most frequently cited journals are in bold print.



Appendix B Source Article Publication Sources

· _			Re	view A	Article	_				
Journal	Lin	Kan	Hebl	Dunc	Harv	Bruv	Fox	Con	Yam	Total
AMA Educators' Conference Proceedings							1	1	1	3
ASA Proceedings					1					1
Advertising Agency	1				1					1
Ag. Dept., U. of Wisconsin									1	1
Akron Business and Economic Review						1				1
American Journal of Public Health			1							1
American Journal of Sociology		1	1			1				1
American Psychologist						1				1
American Sociological Review	5	5	10		10	12			4	13
Applied Statistics					1					1
Arkansas Business and Economic Review					1					1
British Journal of Preventive & Social Medici	ne				1					1
British Journal of Psychiatry					1					1
Bulletin of the British Psychological Society	1				1	1				1
Canadian Review of Sociology & Anthropolo	gy							1		1
College Student Journal					1					1
Educational Research Bulletin	1		1		1	1				1
European Research					1		1	1		1
Industrial Marketing	1				1					2
Industrial Marketing Management								2		2
Journal of Abnormal Social Psychology									1	1
Journal of Advertising					1			1		1
Journal of Advertising Research	5	10	4	5	5	9	5	2	9	14
Journal of Applied Psychology	6	6	14	7	11	27	2	3	11	33
Journal of Business						1		1	1	1

Note: Review articles abbreviated as follows: Linsky, 1975 (Lin); Kanuk & Berenson, 1975 (Kan); Heberlein & Baumgartmer, 1978 (Heb); Duncan, 1979 (Dunc); Harvey, 1987 (Harv); Bruvold & Comer, 1988 (Bruv); Fox, Crask, & Kim, 1988 (Fox); Conant, Smart, & Walker, 1990 (Con); Yammarino, Skinner, & Childers, 1991 (Yam).



Appendix B. Source Article Publication Sources (continued)

			Rev	iev / A	rticle					
Journal -	Lin	Kan	HebD	unc	Harv	Bruv	Fox	Con	Yam	Total
Sournal of Business Communication				1	2	1	1		1	2
Journal of Business Research				1	1	1	1	3	2	4
Journal of Consulting Psychology		1								1
Journal of Consumer Research					1	1				2
Journal of Counseling Psychology	1				1					1
Journal of Educational Psychology			1			1			1	2
Journal of Educational Research	1		2		1	2			1	2
Journal of Experimental Education					1					1
Journal of Experimental Social Psychology						1				1
Journal of Forestry			1			1				
Journal of Juvenile Research			1			1				•
Journal of Marketing	5	6	6	2	9	13	3	4	8	14
Jou mal of Marketing Education								1		
Journal of Marketing Research	2	6	2	15	12	38	15	19	17	4
Journal of Personality and Social Psychology						4				•
Journal of Psychology		1	1							,
Journal of the Academy of Marketing Science					1	. 2	2	4	4	:
Journal of the American Statistical Assn.	3	1	1	1	. 3	4			3	,
Journal of the Market Research Society					ϵ	5 4	1	2	. 8	1
Journal of the Royal Statistical Society	1	1	. 1	1	1	1				
Management Science									1	
Pacific Sociological Review			1			1				
Pedagogical Seminary			1			1				
Perceptual and Motor Skills					1	l				
Personnel Psychology									1	l
Proceedings of the Iowa Academy of Science			1			1				

Note: Review articles abbreviated as follows: Linsky, 1975 (Lin); Kanuk & Berenson, 1975 (Kan); Heberlein & Baumgartmer, 1978 (Heb); Duncan, 1979 (Dunc); Harvey, 1987 (Harv); Bruvold & Comer, 1988 (Bruv); Fox, Crask, & Kim, 1988 (Fox); Conant, Smart, & Walker, 1990 (Con); Yammarino, Skinner, & Childers, 1991 (Yam).



Appendix B. Source Article Publication Sources (continued)

			Re	view Ar	ticle					
Journal	Lin	Kan	Heb	Dunc H	larv	Bruv	Fox	Con	Yam T	otal
Public Opinion Quarterly	15	29	38	20	31	66	7	7	22	83
Public Opinion Quarterly citation only									5	5
Printers Ink	2					1				3
Psychological Bulletin		1				1				1
Psychological Reports				1	3	1			3	6
Psychonomic Science						1			1	1
Quarterly Review of Marketing					1					1
Research in Higher Education					1				1	2
Revista Espanola de la Opinion				1						1
Rural Sociology			1			· 1				1
Social Forces	1		1	. 1	1	1			1	1
Social Science Quarterly				1		2			1	2
Sociological Methods & Research				2						2
Sociological Quarterly					1					1
Sociology and Social Research	2		4	1	3	5				5
Southern Marketing Assn. Proceedings									2	2
U.S. Govt. Printing Office					1	l				1
Vocational Guidance Quarterly	1	l	-	1		l 1	1		1	1
Zeitschrift fur Soziologie									1	:
books	2	2 1	1		!	5				8
manuscripts (unpublished)		l			;	3			2	5

Note: Review articles abbreviated as follows: Linsky, 1975 (Lin); Kanuk & Berenson, 1975 (Kan); Heberlein & Baumgartmer, 1978 (Heb); Duncan, 1979 (Dunc); Harvey, 1987 (Harv); Bruvold & Comer, 1988 (Bruv); Fox, Crask, & Kim, 1988 (Fox); Conant, Smart, & Walker, 1990 (Con); Yammarino, Skinner, & Childers, 1991 (Yam).

